IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TYLER DIVISION

SOVERAIN SOFTWARE LLC,)
Plaintiff,)
vs.) Civil Action No. 6:04cv14
AMAZON.COM, INC. and THE GAP, INC.,) Hon. Leonard E. Davis
Defendants.)

Declaration of Jack D. Grimes, Ph.D.

I, Jack D. Grimes, Ph.D., declare:

I. <u>INTRODUCTION</u>

- 1. My name is Jack D. Grimes, and I reside at 7080 Galli Drive, San Jose, CA 95129. I am an independent consultant. I have prepared this declaration for consideration by the U.S. District Court, Eastern District of Texas, Tyler Division. I am over eighteen years of age and I would otherwise be competent to testify as to the matters set forth herein if I am called upon to do so.
- 2. I have written this declaration at the request of Soverain Software LLC (herein "Soverain"). This declaration was written in support of a brief by Soverain concerning claim construction issues. More specifically, I understand that the scope of this declaration is limited to the issues and technologies presented by certain of the disputed claim terms in the asserted claims of the '314, '492, and '780 patents-in-suit, and the claim constructions asserted by the parties in the Joint Claim Construction and Prehearing Statement (Patent Local Rule 4-3).
- 3. In forming my opinions, I rely on my knowledge and experience in the field and on documents and information referenced in this declaration.

4. I have been retained by Soverain as an expert in this case. No part of my compensation is dependent upon the outcome of this case or any issue in it.

II. BACKGROUND AND EXPERTISE

5. I earned B.S. and M.S. degrees in Electrical Engineering, and a Ph.D. degree in Electrical Engineering (with a minor in Computer Science), all from Iowa State University. I also earned an M.S. degree in Experimental Psychology from the University of Oregon. I have been active in several professional societies and have worked in the computer field for over thirty (30) years. Details of my education and work experience are set forth in my *curriculum vitae*, which is attached as Appendix 1 to this Declaration.

III. INFORMATION CONSIDERED

- 6. In forming my opinions, in addition to my knowledge and experience, I have considered at least excerpts of the following documents and things that I have obtained, or that have been provided to me:
 - a) US Patent No. 5,715,314 (herein "'314 Patent");
 - b) Prosecution history of the '314 Patent, including the references cited therein;
 - c) US Patent No. 5,909,492 (herein "'492 Patent");
 - d) Prosecution history of the '492 Patent, including the references cited therein;
 - e) US Patent No. 5,708,780 (herein "'780 Patent");
 - f) Prosecution history of the '780 Patent, including the references cited therein;
 - g) Patent Law and Practice, Fourth Edition, by Herbert F. Schwartz, © 2003;
 - h) Joint Claim Construction and Prehearing Statement (Patent Local Rule 4-3) in this action, and the associated supporting evidence provided by the parties;
 - i) Hypertext Transfer Protocol, HTTP/1.0 Specifications (herein "HTTP Spec"), © 1999, ISBN: 1-58348-270-9; and
 - i) References cited herein.

IV. <u>OPINIONS</u>

A. The Level of Ordinary Skill in the Relevant Art

- 7. I understand that patent claim language is to be construed according to the meaning that the language would have to persons of ordinary skill in the relevant field.
- 8. The relevant field for the '780 patent is the field of design and development of software for controlling and monitoring access to information on computer networks. The person of ordinary skill in this field would have a Bachelor's degree in electrical engineering, computer science, or the equivalent, and two to three years of work experience in the field.
- 9. The relevant field for the '314 and '492 patents is the field of e-commerce (i.e., sales systems implemented on electronic computer networks). The person of ordinary skill in this field would have a Bachelor's degree in electrical engineering, computer science, or the equivalent, and two to three years of work experience in the field.

B. Proper definition of "path name in a URL" ('780 patent claims)

1. Proper Claim Construction

10. In the asserted claims, the term "path name in a uniform resource locator [URL]" means "sequence of zero or more elements that follows the host address in a URL."

2. Support

11. I have previously submitted two declarations, dated August 6, 2004, and August 23, 2004 (which I understand are also included as Exhibit J to Soverain's claim construction brief), concerning the meaning of the disputed terms "path name in a uniform resource locator" and "appending ... [the session identifier] ... as part of a ... path name in a uniform resource locator" (considered in Section C below) in connection with Soverain's Opposition to Amazon's Motion for Partial Summary Judgment of Non-Infringement ('780 patent), and state that I agree with the content of these declarations, and incorporate them by reference.

- 12. An HTTP URL is a compact representation of the location and access method for a resource available via the Internet. [¶ 9 of Grimes August 6, 2004 Dec.; Abstract, Relative Uniform Resource Locators, RFC 1808, June 1995 (herein "RFC 1808"), attached hereto as Appendix 2]. As stated in my August 6 and 23 declarations, in the '780 patent the term "path name in a uniform resource locator [URL]" means a sequence of zero or more elements (segments) ordered hierarchically that is used by a web server to locate a resource. The "path name" is the URL part located after the name of the host server. In a URL, elements in a "path name" are delimited by the "/" character. [¶¶ 11-12 of the Grimes August 6, 2004 declaration, pp. 5-6; Universal Resource Identifiers in WWW, RFC 1630, June 1994 (herein "RFC 1630"), attached hereto as Appendix 3; Uniform Resource Identifiers (URI): Generic Syntax, RFC 2396, August 1998 (herein "RFC 2396"), attached hereto as Appendix 4].
- 13. Following is a summary of considerations pertinent to the construction of this claim term in the '780 patent:
 - a. The proper definition for the term "path name" must be based on the context of a URL. The prior art section of the '780 patent specification distinguishes the URL context for "path name" from the context of "path name" as used in file system directories. ['780 patent, C1:42-49]. The path in a URL is hierarchical in form but need not be a directory or sequence of directories.
 - b. The purpose of a URL is to "locate" a resource. Retrieving resources in response to an incoming URL is the responsibility of a "web server," which is a program that runs on a host computer. A web server may be configured to correspond to a hierarchical file system, but in general, comprises a software application that responds to a request to determine which resource to process by examining the URL.
 - c. File names or resource names are not required for processing a URL request.

 Thus, there is not always a resource name as a part of a URL. However, if there is a resource name in the URL, it is part of the "path name." [p. 4, Appendix 2,

- RFC 1808; Uniform Resource Locators (URL), RFC 1738, December 1994 (herein "RFC 1738"), attached hereto as Appendix 5].
- d. The resource name can be located at the end of the path name or earlier in the path name. It is the responsibility of the web server to locate the resource when supplied with the URL path name.
- e. The client that sends the URL to the web server does not know the meaning of the elements of the path.
- 14. Amazon's proposed definition for "path name in a uniform resource locator" is:

 The name of the directories or other path leading to the file identified by the URL. Nothing after the file name is part of the path name. "Path name in a uniform resource locator" is not synonymous with "path part of a uniform resource locator."
- 15. This construction is incorrect for several reasons. First, the term "other path" is not clear and cannot be part of a definition for "path name." Second, any reference in the construction to a "file" is unnecessarily limiting. The purpose of a URL is to "locate" a resource, i.e., specify the location, which need not be a file. In addition to files, there are other types of resources accessible on the World Wide Web, e.g., documents, images, downloadable files, services, and logical items stored in databases. ['780 patent, C1:42-49; Appendix 2, RFC 1808, p. 4; Appendix 5, RFC 1738]. Accordingly, in the context of a path name in a URL it is appropriate to consider "resources," as opposed to only "files." As a result, the first two sentences of Amazon's proposed construction are in error.
- 16. Third, since resource names are not required parts of the URL, the phrase "nothing after the file name is part of the path name" is not meaningful to define a "path name in a URL."
- 17. Fourth, in the case when the resource name is part of the URL path, Amazon's proposed definition is incorrect to the extent it appears to exclude the resource name as being part of the "path name." A "resource" may be the contents of a file, e.g., an image, a document, or music. Since a URL is the location of this content, a URL's "path name" necessarily must

either (a) include the "resource name" or (b) the "resource name" must be uniquely determinable by the web server based on the "path name" of the URL. Thus, there is not always a resource name as a part of a URL. However, if there is a resource name (e.g., a file name) in the URL, it is part of the "path name." [p. 4, Appendix 2, RFC 1808].

18. Finally, the third statement of the Amazon construction:

"Path name in a uniform resource locator" is not synonymous with "path part of a uniform resource locator."

contradicts the '780 patent disclosure. The phrase "path part of a [URL]" is disclosed in the '780 specification as one of three parts of a URL, specifically as the third and last part of a URL. The citation at column 2, ll. 28-30, and the text following illustrates this for the case where the resource is a file. Thus, "path part of a [URL]" **is** the same as "path name in a [URL]" in the claims of the '780 patent, as described above, and in my earlier declarations referenced herein.

C. <u>Proper definition of "appending ...[the session identifier] ... as part of a ...</u> path name in a URL" ('780 patent claims)

1. Proper Claim Construction

19. In the asserted claims, the phrase "appending ... [the session identifier] ... as part of a ... path name in a URL" means "tagging, adding, affixing or supplementing [the session identifier] to the URL as part of a path name."

- 20. "Path name in a URL" is "sequence of zero or more elements that follows the host address in a URL." See Section B above.
- 21. The specification refers to the session identifier as a "tag" and uses "appending" interchangeably with "tagging." ['780 patent, C4:25-31, C7:14-16]. Thus, consistent with the above definition, the session identifier can be placed as an element anywhere in the path, i.e., the session identifier is part of the "path name" even if it appears as the final element.
- 22. Amazon's proposed construction for "appending ...[the session identifier] ... as part of a ... path name in a URL" is

Adding something within a pre-existing item to create a modified item, as opposed to attaching something to the outside (e.g., the end) of the item.

- 23. As I understand this construction, when read in combination with Amazon's construction of a "path name in a [URL]," it appears that according to Amazon the "session identifier [SID]" must be located before the "file name" of the URL. This construction is erroneous. First, as discussed above, the resource name (e.g., file name) is part of the "path name." Second, the '780 patent specification provides an embodiment where the SID is appended to the URL after the normal location of the name of the target resource, i.e., as the last element of the "path name." Thus, the specification contradicts Amazon's position.
- 24. In particular, the '780 patent specification explicitly discloses appending an identifier after the "file name"; in addition, the specification discloses appending an identifier as an intermediate element of the "path name." The '780 patent uses the term "tagged" as equivalent to "appended." ['780 Patent, C7:14-16].
- 25. The function, "TclIdSid", included as part of the source code listings in the '780 Patent specification, written in the C programming language, shows an algorithm for obtaining the SID. The logic of this algorithm indicates that the identifier is obtained if it is found as either an intermediate path element of the URL enclosed between "/" delimiters, or as the last path element without a trailing "/" delimiter. ['780 Patent, C31, C32]. Descriptions in the patent specification that refer to appending an identifier before or after a "file name" should be interpreted as examples, without restricting the generality of "path name" in the context of a URL.
- 26. Accordingly, in the '780 patent to "append ... [a SID] ... as part of a path name in a URL" means "tagging, adding, affixing or supplementing [the session identifier] to the URL as part of a path name." The SID can be an intermediate element or the last element in the path name.

D. HTTP ('780 patent claims)

1. Proper Claim Construction

27. In the asserted claims, the term "hypertext transfer protocol" means the client/server protocol used to access information on the World Wide Web.

- 28. The Hypertext Transfer Protocol ("HTTP") is an application-level protocol for distributed, collaborative, hypermedia information systems. It is a generic, client/server, object-oriented protocol which can be used for searching, retrieving and manipulating data, and is the protocol for the World Wide Web. [Hypertext Transfer Protocol -- HTTP/1.1 January 1997, RFC 2068 (herein "RFC 2068"), Abstract, attached hereto as Appendix 6; '780 patent C2:1-15].
- 29. While the term "hypertext" was known since the 1960s to signify text linked together in a complex non-sequential web of associations in which the user can browse through related topics, HTTP is a more recent concept and has been in use by the World Wide Web global information initiative since 1990. [Appendix 6, RFC 2068, p. 6.]
- 30. As the Internet developed in the early 1990s, HTTP remained a work in progress, modifications being distributed as a series of "informational" draft specifications. HTTP was first defined by Tim Berners-Lee in 1992. [p. vii, HTTP Spec, attached hereto as Appendix 7].
- 31. HTTP uses a "<major>.<minor>" numbering scheme to indicate versions of the protocol. The protocol versioning policy is intended to allow the sender to indicate the format of a message and the protocol's capacity for understanding further HTTP communication, rather than the features obtained via that communication. No change is made to the version number for the addition of message components which do not affect communication behavior or which only add to extensible field values. [Appendix 6, RFC 2068]
- 32. The <minor> number is incremented when the changes made to the protocol add features which do not change the general message parsing algorithm, but which may add to the message semantics and imply additional capabilities of the sender. The <major> number is incremented when the format of a message within the protocol is changed.

- 33. The first version of HTTP, referred to as HTTP/0.9, was a simple protocol for raw data transfer across the Internet. A series of specifications known as HTTP/1.0 improved the protocol by allowing messages to be in the format of MIME-like messages, containing meta-information about the data transferred and modifiers on the request/response semantics. The proliferation of incompletely-implemented applications calling themselves "HTTP/1.0" and certain other deficiencies necessitated a protocol version change in order for two communicating applications to determine each other's true capabilities. The current version of the HTTP is known as HTTP/1.1. HTTP/1.1 was actively developed until 1999, and at present is the prevailing protocol used on the Web. In general, newer versions of the protocol are backward compatible and support early versions. [p. 96, Appendix 7, HTTP Spec.].
 - 34. The '780 patent refers to HTTP generically:

Created in 1991, the Web is based on the concept of "hypertext" and a transfer method known as "HTTP" (Hypertext Transfer Protocol). HTTP is designed to run primarily over TCP/IP and uses the standard Internet setup where a server issues the data and a client displays or processes it. [C2:1-6, '780 patent].

The specification does not distinguish protocol versions. The '780 patent specification has incorporated by reference the application which matured into the '314 patent, and which contains a listing of an HTTP protocol draft specification dated 1994. This listing should be interpreted as an example of the day, without restricting the generality of "HTTP" in the claims of the patent.

- 35. Amazon's proposed definition for "hypertext transfer protocol" is: The Hypertext Transfer Protocol transfer method as it existed on June 7, 1995.
- 36. This definition is ambiguous and unnecessarily restrictive. First, during the time period when the '780 patent was filed and prosecuted 1995 to 1998 multiple drafts and revisions of the HTTP/1.0 and 1.1 protocols were distributed.
- 37. Second, the only protocol version change since 1995 is a minor number change (from 1.0 to 1.1), signifying that changes made to the protocol add features which do not change

the general message parsing algorithm, but provide additional, backward compatible capabilities. These changes are not relevant in the context of the '780 patent claims. For example, the '780 patent specification refers to request and response messages between a client and a server using HTTP methods GET and POST, which are the same for the HTTP/1.0 and HTTP/1.1 versions.

38. Thus, "HTTP" in the claims of the '780 patent should be interpreted generically as the client/server protocol used to access resources on the World Wide Web.

E. Session ('780 patent claims)

1. Proper Claim Construction

39. In the asserted claims, the term "session" means "a series of requests and responses to perform a complete task or set of tasks between a client and a server system."

- 40. The '780 patent claims recite a "session of requests" and discuss the "session" in the context of a client/server environment. [See '780 patent claim 1, reciting a "method of processing service requests from a client to a server system through a network."].
- 41. The term "session" is also well-known in the field of data communications, and depending on the context may have different meanings, and so, in order to establish the proper meaning, one has to consult the '780 patent specification, including the claims.
- 42. With reference to the illustration of a "session" in Fig. 3 of the patent, and its description at col. 7 to col. 8, the '780 patent indicates that requests and responses between the client and the server system are at an application level, which is the level at which users interact with the system. This is important because "session" has a different, well-established meaning in the context of the Open System Interconnection (OSI) reference model, which defines a networking framework for implementing communications protocols in seven layers.
- 43. One of the OSI layers is called a "session layer" (OSI level 5). In the OSI reference model, applications, e.g., a web browser, are at level 7. The session layer is one of the lower layers of the OSI communications, and is one of the layers that Tanenbaum characterizes as "just interested in moving bits reliably from here to there." [p. 18, Tanenbaum, 2nd Ed. 1989,

attached hereto as Appendix 8]. Tanenbaum also states that the "session layer" in the OSI model is not present in the TCP/IP reference model used in Internet communications, which are the subject of the '780 patent. [p. 36, Tanenbaum, 3rd Ed. 1996, attached hereto as Appendix 9]. Accordingly, the use of the OSI reference model's "session layer" concept in interpreting the claims of the '780 patent is improper for two reasons. First, there is no session layer in the TCP/IP protocols used in the Internet, as shown in the figure below. [p. 36, Appendix 9, Tanenbaum, 3rd Ed. 1996]. Second, the OSI "session layer" is at a lower level in the OSI model, compared to the '780 patent claims' use of "session."

44. In the '780 patent "a session" is used in the context of performing a task to

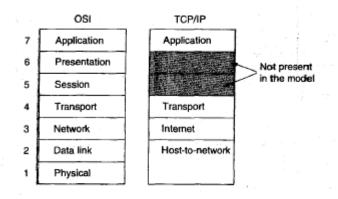


Fig. 1-18. The TCP/IP reference model.

completion, i.e., the user accessing one or more documents in a particular domain. See, for example, Fig. 3, and its description at Col. 7-8. In that regard, I consider "session" to be similar to a layman's understanding of, for example, a session of Congress.

45. For the foregoing reasons, I believe that the proper construction of "session" is "a series of requests and responses to perform a complete task or set of tasks between a client and a server system."

- 46. Amazon's proposed construction for "session" is:
 - An uninterrupted series of requests and responses between (1) a specific client (identified by its network address) and user and (2) a specific server.
- 47. Amazon's construction is incorrect for several reasons. First, the requirement that a "session" be an "uninterrupted" series of requests and responses is ambiguous and, to the extent it can be understood, improper. The requirement for a "session" to be uninterrupted is ambiguous, because "uninterrupted session" does not have an ordinary meaning. Neither the claims not the specification impose any limitation on the manner in which service request are processed within a session.
- 48. Second, Amazon's proposed construction imposes an unnecessary limitation that the user be identified within a session. For example, Fig. 3 shows a typical session containing many message exchanges, (e.g., exchanges #1 and #2 for uncontrolled pages), two of which do not involve user identification.
- 49. Third, Amazon's requirement that a client communicates with a <u>specific</u> server within a session contradicts the disclosure of the '780 patent. The asserted claims are directed to communications between a client a <u>server system</u>, the clear implication being that one client can communicate with multiple servers. Fig. 3 of the patent illustrates that in a preferred embodiment of a session a client (50) communicates with at least two servers in the server system the content server (52) and an authentication server (54).

F. "computer" ('314 and '492 patent claims)

1. Proper Claim Construction

50. In the asserted claims, the term "computer" means a "functional unit that can perform substantial computation, including numerous arithmetic operations, or logic operations without human intervention."

2. Support

- 51. The claims refer to various networked computers, e.g., payment computer or shopping cart computer. As used in the claims, "computer" means, to a person of ordinary skill in the art, "a functional unit that can perform substantial computation, including numerous arithmetic operations, or logic operations without intervention by a human operator during a run." This ordinary meaning is consistent with the definition in the IEEE Standard Dictionary of Electrical and Electronics Terms, Sixth Edition, 1996 ("IEEE Dictionary," attached hereto as Appendix 10), an authoritative dictionary in the field, at page 192. This ordinary meaning is consistent with the use of the term in the claims, and with the patent specification, which describes the various computers in the system as performing arithmetic and/or logic operations. [See, for example, '314 patent at C5:57-C7:30 (various operations of the payment computer) and C7:31-54 (various operations of the merchant computer)].
- 52. The term "computer" does not require that the computer consist of a single processing unit. To the contrary, the ordinary meaning of "computer" encompasses one or more interconnected processing units. This aspect of the meaning of the word "computer" is also reflected in the IEEE Dictionary, which, at page 192, further defines "computer" as a device that "consists of one or more associated processing units," and "[m]ay be stand alone, or may consist of several interconnected units." The claims, specification, and prosecution history of the '314 and '492 patents are consistent with this aspect of the ordinary meaning of the term "computer."
- 53. An example of a "computer" consisting of multiple processing units operating in a coordinated way to contribute to the performance of an overall functional goal is a distributed system. As stated in Tanenbaum, <u>Computer Networks</u>, Second Edition, p. 2:

There is considerable confusion in the literature between a computer network and a **distributed system**. The key distinction is that in a distributed system, the existence of multiple autonomous computers is transparent (i.e., not visible) to the user. He can type a command to run an program, and it runs. It is up to the operating system to select the best processor, find and transport all the input files to that processor, and put the results in the appropriate place. [Emphasis in original, footnote omitted].

- 54. Limiting the term "computer" to a single physical device or box is incorrect. For example, a shopping cart computer function may be implemented as a distributed system on several physical boxes. It is also incorrect to limit the term "computer" to physical devices or boxes which only perform one function. For example, a shopping cart computer function and a merchant computer function may operate on a single physical box. The choice among various configurations is a design decision.
- 55. The Defendants' proposed definition that a computer is a "device" is inconsistent with the meaning of the term "computer," as used in the intrinsic evidence.

G. "public packet switched computer network" ('314 and '492 patent claims)

1. Proper Claim Construction

56. In the asserted claims, the term "public packet switched computer network" means "a packet switched computer network, accessible by the public through communication common carriers to provide data transmission services."

- 57. The term "public packet switched computer network" has a well-defined meaning to a person of ordinary skill in the art. Specifically, and consistent with a technical dictionary definition, it would be understood to mean a public data network that uses packet switching techniques. [See App. 9, IEEE Dictionary, p. 834] (Defining a "public packet switching network" as "[a] public data network that uses packet switching techniques.").
- 58. The term "public data network" has a well-defined meaning to a person of ordinary skill in the art. Specifically, it is a network established and operated by common carriers for the purpose of providing data transmission services to the public. [See Appendix 10, IEEE Dictionary, p. 834] (Defining "public data network" as "[a] network established and operated by communication common carriers or telecommunications administrations for the specific purpose of providing low error-rate data transmission services to the public.").

Examples of common carriers are telephone companies and cable companies offering Internet access services to the public.

- 59. The term "packet switching" has a well-defined meaning to a person of ordinary skill in the art. Specifically, it is a data communication protocol in which messages are broken into small units of information (packets), which are relayed through nodes in a computer network. Upon reaching the destination, the packets are reassembled into the messages. [See Appendix 10, IEEE Dictionary, p. 741] (Defining "packet switching" as "[a] technique used in data communication in which messages are broken into finite-sized packets and are forwarded to the other party over the network."). The common alternative to a "packet switched network" is a "circuit switched network" such as Plain Old Telephone Service (POTS) networks.
- 60. In view of the above, a person of ordinary skill in the art would understand a "public packet switched computer network" to be a computer network accessible to the public, with access established and operated by a common carrier delivering information using a packet switching protocol. A common example of a "public packet switched computer network" is the World Wide Web accessed through a common carrier, such as a telephone company.
- 61. Defendants' proposed construction for the term "public packet switched computer network" is

[a]ny computer network that is accessible by a member of the public (regardless of whether a fee is charged for access)

The phrase "accessible by a member of the public" is too broad, and includes subscription-based computer networks in which users pay subscription fees in exchange for getting access to proprietary content. Because a person of ordinary skill in the art understands the term "public packet switched computer network" to refer to a network where access is established and operated by common carriers for the purpose of providing data transmission services to the public (as discussed above), the defendants' proposed definition is not consistent with the ordinary meaning of this term.

62. The defendants' definition of the term "public packet switched computer network" also includes the following list of items which they assert are examples of "a packet switching protocol":

TCP/IP
X.25
IPX/SPX
DECNET
ATM
FDDI
Token Ring, and
Appletalk.

I agree with the Defendants that the listed items are <u>protocols</u> which can be used for communication on a network, but are not examples of <u>networks</u>, *per se*. Specifying a protocol is not sufficient. Packet switched protocols are characteristic of both public and private packet switched networks. For example, the network in my house, which uses the IP protocol, is not "public."

H. "creat[ing] said merchant database" ('314 and '492 patent claims)

1. Proper Claim Construction

63. In the asserted claims, the terms "creating said merchant database" and "to create said merchant database" means "to produce a database."

- 64. Claims 1 and 5 of the '492 patent recite a "creation computer for creating said merchant database." The claimed creation computer also "transmit[s] said digital advertisements and said product fulfillment items over said network to said merchant computer."
- 65. A person of ordinary skill in the art would understand that a database consists of two aspects. First, the structure of the database, known as the schema, and second, the content of the database. The structure of the database is established once, in the beginning, whereas the population and modification of the database content is an on-going activity. The specification of

the '314 and '492 patents is concerned with database population and modification, whereas the initial database structure creation occurred previously.

- 66. The specification discloses that the "[c]reation computer 20 creates a digital advertisement database 18 that stores advertising documents ... and product fulfillment items." ['314 patent, C4:52-60]. The creation computer transmits the content to the database of the merchant computer. ['314 patent, C4:60-65]. The merchant computer maintains content locally in an advertising document database 15, for use in transmitting advertisements and fulfillment items to buyers. [See '314 patent, C4:60-63, C5:16-25, and C7:46-51].
 - 67. The specification discloses that:

Creation computer 20 creates a digital advertisement database 18 that stores advertising documents (which may for example be in the form of summaries of newspaper or newsletter articles, accompanied by prices) and product fulfillment items (which may be the products themselves if the products can be transmitted over the network, or which may be hard goods identifiers if the products are hard goods, i.e., durable products as opposed to information products). ['314 patent, C4:52-60].

The creation of the database content by the creation computer is a "back office" creative function, distinct from the merchant computer using that content to provide product information to the user

68. The specification discloses that:

Creation computer 20 transmits contents of the advertising document database 18 to merchant computer 14 to enable the merchant computer to cause advertisements and products to be sent to buyers. Merchant computer 14 maintains advertising documents locally in advertising document database 15. In an alternative embodiment, the creation computer does not have a local digital advertisement database, but instead updates a remote advertising document database on a merchant computer. ['314 patent, C4:60-C5:1].

The function of the creation computer is to populate and update the content available for transmission to users; this may take place in the digital advertisement database, or, optionally, in the advertising document database associated with the merchant computer.

- 69. Claims 1 and 5 of the '492 patent recite "a merchant database comprising a plurality of digital advertisements and a plurality of respective product fulfillment items," which provides the antecedent for "said merchant database" that is created by the creation computer. This means that the creation computer must produce the "plurality of digital advertisements and a plurality of respective product fulfillment items." As a result, and consistent with the written description, one of ordinary skill in the art would understand that the phrase in claims 1 and 5, "creat[ing] said merchant database" means to populate and update the merchant database, i.e., to produce a database.
- 70. The Defendants argue that the term "creating [a] database" should be interpreted to mean

"[m]ake (bring into existence) for the first time the structured set of data records in a file. Updating the data or records in a pre-existing database is not creating a database."

The Defendants' definition ignores the main activity of the creation computer, which is to populate and update product description items and fulfillment items in the merchant database.

- 71. The plain meaning of the claim language is that the database comprises advertisements and product fulfillment items. There is no mention in the claim language of creating the structure of the database. Therefore, bringing the database structure into existence is not an appropriate limitation for this claim.
- 72. In support of their proposed definition of the term "creating [a] database," Defendants cite to portions of reference and training guides for Microsoft's "SQL Server" database software. (Inside Microsoft SQL Server 7.0 and Microsoft SQL Server Training). The Microsoft SQL Server database software is not referenced at all by the intrinsic evidence. These guides are written for users of that particular software. I do not understand how this evidence is related to this matter.

v. <u>CONCLUSION</u>

- 73. This declaration provides opinions for some of the claim terms in dispute among the parties in this matter. I note that my analysis is continuing and that I may modify or supplement my conclusions as I receive additional information.
 - 74. I declare under penalty of perjury that the foregoing is true and correct.

Executed in San Jose, CA.

Dated: Movember 15,2004